Amendments to the Claims under 37 C.F.R. § 1.121

Claim 1 (currently amended): A method for isolating pluripotent progenitor cells having ~~Stem~~stem cell-like characteristics of SSEA-4 and Tra-1-60 marker expression from a human mammary secretion of a male or female human body, wherein pluripotent cells are isolated directly or indirectly from colostrum, mature milk, or dry period secretion during at least one time period selected from the group consisting of a non-pregnant period, a pregnant period, a lactating period, and an involuting period, wherein the whole human mammary secretion is subjected to centrifugation, wherein following centrifugation the progenitor cells are separated from a cell pellet by suspending the cell pellet in a growth medium and immuno-isolating the progenitor cells with magnetic beads and progenitor cell-specific antibodies.

Claim 2 (cancelled).

Claim 3 (previously presented): A method according to claim 1, wherein said progenitor cells are isolated from an acellular portion of the mammary secretion that is separated from a cellular portion.

Claim 4 (previously presented): A method according to claim 3, wherein non-pluripotent cells are removed from the cellular portion of the mammary secretion.

Claim 5 (previously presented): A method according to claim 1, wherein human secretory epithelial cells and leucocytes, and microorganisms are removed from the mammary secretion.

Claim 6 (previously presented): A method according to claim 1, wherein progenitor cells are isolated from mammary secretions isolated during lactating periods wherein said lactating periods are selected from the group consisting of the period after beginning of individual feeding, and the early lactation period.

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Claim 7 (cancelled).

Claim 8 (previously presented): A method according to claim 1, wherein in a first step cellular components are washed out of the mammary secretion and retained, in a second step said cellular components are stained with antibodies to the progenitor cell markers, and in a third step the progenitor cells are separated from the other cells directly or indirectly by means of the attached antibodies.

Claim 9 (previously presented): A method according to claim 8, wherein the antibody-stained progenitor cells are attached to beads and the progenitor cells are isolated using said beads, wherein when said beads are small iron beads, said beads are isolated using a magnet, and wherein subsequently the beads or the antibodies or both are removed from the progenitor cells.

Claim 10 (previously presented): A method according to claim 9, wherein the beads are removed using an enzyme selected from the group consisting of DNase, Proteinase, and RNase.

Claim 11 (previously presented): A method according to claim 1, wherein the progenitor cells are cultured without using a fibroblast feeder layer.

Claim 12 (previously presented): A method according to claim 1, wherein in

(i) a first step the whole human mammary secretion is subjected to centrifugation leaving a fat layer on top, a protein and carbohydrate rich supernatant beneath it, and at the bottom a pellet of cells;

(ii) in a second step the fat fraction and supernatant are removed;

(iii) in a third step a volume of a buffer or cell culture media is added and the cells are resuspended in the buffer or media and centrifuged as in the first step and repeating this step 3 or 4 times, leaving a substantially pure cell pellet; and

(iv) in a fourth step separating the progenitor cells from the cell pellet.

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Claim 13 (previously presented): A method according to claim 12, wherein the progenitor cells are separated from the cell pellet in that:

(iv-1) the cell pellet is suspended in cell culture media;

(iv-2) this suspension is incubated for 15 minutes at 4°C with progenitor cell-specific or stem[[-]]cell-specific antibodies linked to magnetic beads via a small strand of DNA;

(iv-3) a magnet is positioned in proximity to the suspension, whereby cells that have bound to the magnetic beads attract the progenitor cells connected with the beads to the magnet, whereas unbound cells are not attracted by the magnet and remain in the supernatant; and

(iv-4) the supernatant is removed, leaving only the progenitor cells bound to the beads via the progenitor cell antibody.

Claim 14 (previously presented): A method according to claim 13, wherein thereafter:

(v) progenitor cells bound to the beads via the stem cell-specific antibodies are removed by a cleavage means, wherein when the antibody is attached to the beads via small strand of DNA, said cleavage means is a DNase,

(vi) the beads are removed by positioning the magnet to attract the beads, no longer attached to the stem cells, to it; and

(vii) removing the supernatant containing the isolated progenitor cells.

Claim 15 (previously presented): A method according to claim 1, wherein the cells, following centrifugation, are incubated in a growth media that is permissive for growth of progenitor cells, stem cells or lactocyte growth.

Claim 16 (previously presented): A method according to claim 15, wherein in

(i) a first step the unfractionated human mammary secretion is subjected to centrifugation leaving a fat layer on top, a protein and carbohydrate rich supernatant beneath it, and at the bottom a pellet of cells;

(ii) in a second step, the cell pellet is washed in cell culture media;

(iii) in a third step the cells comprising the cell pellet are plated onto a cell culture

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vessel in bacteriocidal, fungicidal or both bacteriocidal and fungicidal growth media and incubated for 10-30 days and thereafter,

(iv) the cells are harvested and washed using buffer or growth media, and

(v) the harvested cells are plated onto a reconstituted basement membrane preparation.

Claim 17 (previously presented): A method according to claim 16, wherein in step (v) the solubulized basement membrane preparation is extracted from EHS mouse sarcoma.

Claim 18 (cancelled).

Claim 19 (withdrawn): A method for creating cells or tissues in a mother or infant comprising administering to the mother or infant pluripotent or multipotent progenitor cells prepared according to the method of claim 1.

Claim 20 (cancelled).

Claim 21 (withdrawn): A method according to claim 19, further comprising gene therapy treatments or intrauterine foetal treatments.

Claim 22 (withdrawn): A method according to claim 19, wherein the cells or tissues are administered for the treatment of disease.

Claim 23 (cancelled).

Claim 24 (withdrawn): A method of claim 19, wherein the cells or tissues are administered for diagnosis, bioengineering, lactoengineering, breast tissue regeneration, breast reconstructive surgery, breast cosmetic or enhancement surgery, exocrine gland tissue regeneration and/or surgery.

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